

Claims

1. Method for operating an RLAN arrangement which has a plurality of communication units (10, 20) or communication nodes (10, 20),
- comprising a step or process of monitoring and/or of detecting the presence of signals of or from external radio sources or radar sources (100),
 - 5 - wherein upon the presence of signals of or from an external radio source or radar source (100) or upon detecting thereof in the case of a coincidence and/or overlap of an actual communication channel (30) or frequency band of the RLAN arrangement (1) with a channel (101) of the signal of or from the external radio source or radar source (100) the actual communication channel (30) or frequency band is changed, and
 - 10 - wherein said step or process of monitoring and/or detecting the presence of signals of or from external radio sources or radar sources (100) is performed by at least one of said communication units (10, 2) or communication nodes (10, 20) as monitoring units being not in a transmission state,
 - 15 - thereby realizing a continuous and uninterrupted monitoring or detection of the presence of signals of or from external radio sources or radar sources (100) over the complete operation time of the RLAN arrangement (1).
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2. Method according to claim 1,
- wherein said step or process of monitoring and/or detecting the presence of signals of or from external radio sources or radar sources (100) is performed by a plurality of said communication units (10, 2) or communication nodes
- 25 (10, 20) being not in a transmission state as a plurality of monitoring units, in particular in a distributed manner.
3. Method according to anyone of the preceding claims,
- wherein said step or process of monitoring and/or detecting the presence of signals of or from external radio sources or radar sources (100) is performed by an entirety of said communication units (10, 2) or communication nodes
- 30 (10, 20) being not in a transmission state as an entirety of monitoring units, in particular in a distributed manner.
- 35 4. Method according to anyone of the preceding claims,
- wherein said communication units (10, 20) or communication nodes (10, 20) perform as said monitoring units said step or process of monitoring and/or

detecting the presence of signals of or from external radio sources or radar sources (100) at most in a receiving state and/or in a monitoring state, in particular during receiving periods and/or idle monitoring periods of a non-transmit phase and/or a MAC frame.

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5. Method according to anyone of the preceding claims,
wherein a wireless terminal (WT1, WT2, WT3) or a wireless terminal device as a component of said RLAN arrangement is used as said communication unit (20) or as said communication node (20), in particular as said monitoring unit.

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6. Method according to anyone of the preceding claims,
wherein a central controller (CC) and/or an access point (AP) as a component of said RLAN arrangement is used as said communication unit (10) or as said communication node (10), in particular as said monitoring unit.

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7. Method according to anyone of the preceding claims,
wherein for said monitoring units a predefined sensitivity level and/or a predefined sensitivity threshold is used.

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8. Method according to anyone of the preceding claims,
wherein within said receiving periods and/or in said receiving state said monitoring units are continuously adjusted and/or set to a receiving power level,

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- which enables a stable service receipt or stable receipt of internal signals of the RLAN arrangement, and
- which enables a detection of the presence of signals of or from external radio sources or radar sources (100) down to a given and predefined threshold, in particular with said given sensitivity level or sensitivity threshold.

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9. Method according to anyone of the preceding claims,
wherein within transmitting periods or in said transmitting state said communication units (10, 20) and/or communication nodes (10, 20) are continuously adjusted and/or set to a transmitting power level

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- which enables a stable service receipt or stable receipt of internal signals of the RLAN arrangement, and
- which enables a detection of the presence of signals of or from external radio sources or radar sources (100) down to a given and predefined

threshold, in particular with said given sensitivity level or sensitivity threshold.

10. Method according to any one of the preceding claims,

- 5 - where upon detection of an interference pattern by a wireless terminal (WT) a message CHANNEL_INTERFERENCE_DETECTION announcing a detection of an interference pattern is send from said detecting wireless terminal to a central controller (CC) and/or
- 10 - wherein upon receipt of a message CHANNEL_INTERFERENCE_DETECTION announcing a detection of an interference pattern a message CHANNEL_INTERFERENCE_DETECTION_ACK indicating the acknowledgement of said message CHANNEL_INTERFERENCE_DETECTION is sent by said central controller (CC).

15 **11.** RLAN arrangement,

which is capable of performing or realizing the method for operating an RLAN arrangement according to anyone of the preceding claims 1 to 10, and/or the steps thereof.

20 **12.** Computer program product,

comprising computer program means adapted to perform and/or to realize the method for operating an RLAN arrangement according to anyone of the claims 1 to 10 and/or the steps thereof, when it is executed on a computer, a digital signal processing means, and/or the like.

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13. Computer readable storage medium,

comprising a computer program product according to claim 12.

List of Referenc Symbols

	1	RLAN arrangement, RLAN, radio local area network
	10	communication unit, communication node, access point, central controller
5	11	antenna
	12	RF stage
	13	base band DSP, base band digital signal processor
	14	radar detector
	15	micro processor
10	16	external terminal
	20	communication unit, communication node, wireless terminal
	21	antenna
	22	RF stage
	23	base band DSP, base band digital signal processor
15	24	radar detector
	25	micro processor
	26	external terminal
	30	communication channel of the RLAN, frequency band
	31	communication channel of the RLAN, frequency band
20	100	external radio source, external radar source
	101	external communication channel, external frequency band
	AP	access point
	CC	central controller
25	WT1	wireless terminal
	WT2	wireless terminal
	WT3	wireless terminal